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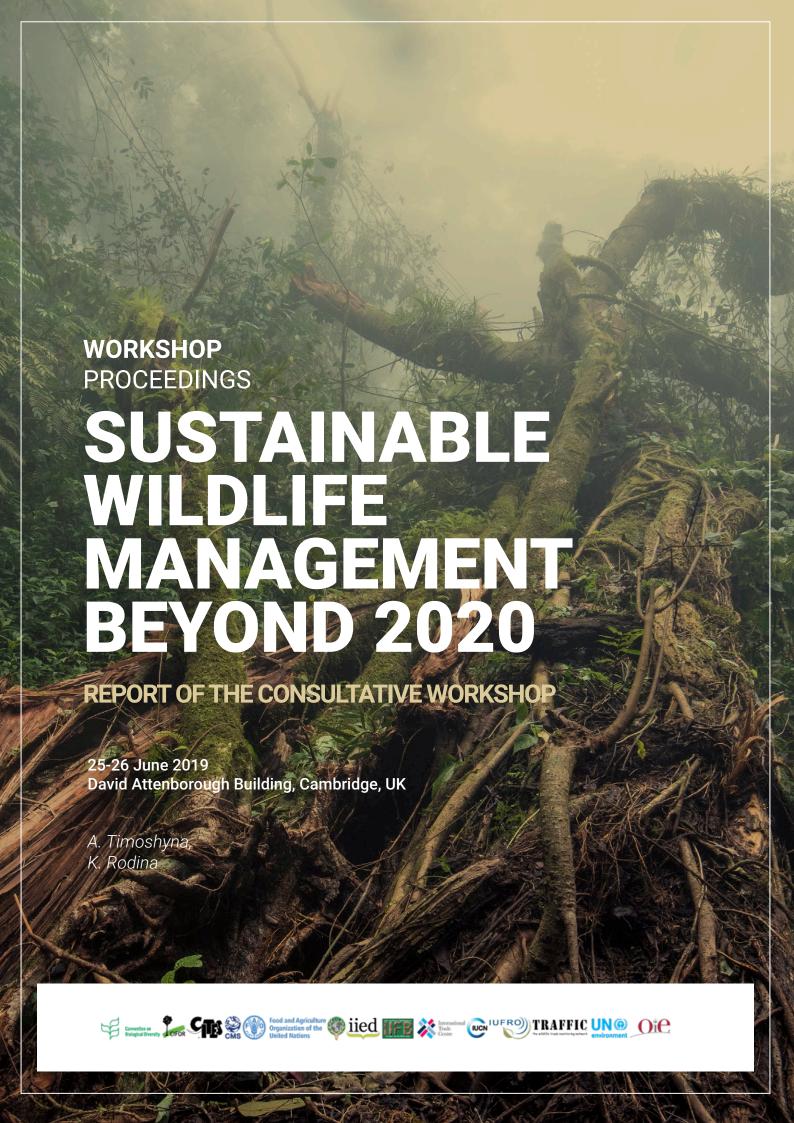
CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA

Eighteenth meeting of the Conference of the Parties Geneva (Switzerland), 17-28 August 2019

WORKSHOP PROCEEDINGS: SUSTAINABLE WILDLIFE MANAGEMENT BEYOND 2020

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1. Workshop background

Sustainable wildlife management (SWM) is the focus of considerable international attention and efforts, demonstrated by its inclusion in the Sustainable Development Goals (SDGs) and relevance for several Aichi Biodiversity Targets, because of its importance for biodiversity conservation, human health and well-being, livelihoods and food security. More specifically, the 14th Meeting of the Conference of the Parties to the Convention on Biological Diversity (CBD COP14) held in Sharm El-Sheikh, Egypt in November 2018, adopted the <u>Decision 14/7 on sustainable wildlife management</u>, which welcomed the voluntary guidance for a sustainable wild meat sector.

In addition, key issues related to SWM were also the major focus of the <u>second Wildlife Forum</u> that was organized by the <u>Collaborative Partnership on Sustainable Wildlife Management (CPW)</u> and the African Union Commission (AUC), on the margins of that Conference. One of the <u>key messages</u> that came out of the second Wildlife Forum focused on the importance of the integration of the wildlife issues into the <u>Post-2020 Biodiversity Global Framework</u> (hereafter 'Post-2020 framework') of the CBD as a stepping stone towards the 2050 Vision of "Living in harmony with nature" ¹.

As part of its ongoing work, CPW members and partners convened a two-day Consultative Workshop on Sustainable Wildlife Management Beyond (SWM) 2020, in order to develop a better understanding on how to incorporate SWM within the Post-2020 framework. This workshop responded directly to the Decision 14/34 of the CBD CoP14 on comprehensive and participatory process for the preparation of the post-2020 global biodiversity framework.

Guided by the CBD Secretariat, the workshop programme involved information exchange on the ongoing work in the area of SWM and the current state of affairs related to wildlife management, as well as work through a series of thematic topics to develop suggestions to further inform the development of the Post-2020 framework. The Workshop agenda is presented in Annex 1. The Workshop also provided a good opportunity to engage the partners of the Cambridge Conservation Initiative (CCI), Civil Society Organizations (CSOs) and Non-governmental Organizations (NGOs), scientists, and other relevant international organizations in the "Post-2020 Global Biodiversity Framework".

Workshop Aims

- 1. Facilitate exchange of information on the ongoing work in the area of sustainable wildlife management;
- 2. Help inform the CPW response to the development of a Post-2020 biodiversity framework and the role of sustainable wildlife management; and
- 3. Provide the CBD Secretariat and Parties with consolidated views from CPW members, CCI members and other organizations, on how to best integrate wildlife related aspects in developing a new framework.

The Workshop brought together over 40 participants from different organizations, including the CPW partners (i.e. CBD Secretariat, CITES Secretariat, CMS Secretariat, TRAFFIC, IIED, CIFOR, FAO, IUCN, CIC, UN Environment, OIE), the partners of CCI (i.e. FFI, Birdlife, RSPB, BTO, University of Cambridge, Tropical Biology Association, UNEP-WCMC, IUCN, and TRAFFIC), as well as other organizations (WWF, University of Oxford, IUCN HWC Task Force). For full list of participants, see Annex 2.

¹ https://www.cbd.int/doc/c/0b54/1750/607267ea9109b52b750314a0/cop-14-09-en.pdf

2. Scope of Sustainable Wildlife Management

One of the issues clarified in the beginning and confirmed throughout the duration of the workshop was the scope of the definition of 'wildlife'.

The Workshop participants agreed to extend the discussions to include wild species of fauna, flora and fungi. Such scope is particularly relevant in the context of the second objective of CBD on sustainable use of biodiversity components, including all living organisms in use and requiring systems and approaches for sustainable use and trade.

The CPW defines 'sustainable wildlife management' (SWM) as the sound management of wildlife species to sustain their populations and habitat over time, taking into account the socioeconomic needs of human populations. This requires that all land-users within the wildlife habitat are aware of and consider the effects of their activities on the wildlife resources and habitat, and on other user groups².

3. Sustainable Wildlife Management: ongoing work

A presentation about the **Collaborative Partnership on Sustainable Wildlife Management** (CPW) and its activities was delivered by *Kristina Rodina*, the Secretary of the CPW (UN FAO). The CPW is a voluntary partnership of 14 international governmental and nongovernmental organizations, secretariats of multilateral environmental agreements, and research institutions with substantive mandates and programmes to promote the sustainable use and conservation of wildlife resources. Established in March 2013 in Bangkok, CPW provides a platform for addressing wildlife management issues that require national and supra-national responses. It also works to promote and increase cooperation and coordination on SWM issues among its members and partners. For further information about the CPW, see the partnership's <u>website</u> and progress report for 2017-2018 (CBD/COP/14/INF/11)³ issued for the COP14 of the CBD.

A range of presentations were delivered by the workshop participants on the first day of the workshop to set the scene for the ongoing work around SWM, identify opportunities and challenges. The presentations were grouped around three themes: (1) Wildlife, food security and livelihoods; (2) Wildlife offtake, harvesting, hunting and trade; and (3) Human-wildlife-livestock interface.

Within the theme of **Wildlife, food security and livelihoods**, three presentations were delivered. These were kicked-off by *Dilys Roe* (IIED and IUCN SULi), who spoke about the experiences to date with developing and implementing the theory of change for understanding and empowering communities in addressing the issue of illegal wildlife trade (IWT).

Bianca Notarbartolo di Sciara (UN Environment) presented the recently launched programme entitled "Landscape, Wildlife, People", focusing on securing thriving wildlife and human livelihoods in the context of co-existence landscapes, with pilot elements being implemented in two areas in Africa (KAZA and TRIDOM, focusing on African elephants).

Finally, Daniel Ingram (University of Sterling / CIFOR) presented the Guidance on sustainable wild meat sector, linked to the implementation of the CBD Decision 14/7, with inputs from Kristina Rodina (FAO) on introducing the Sustainable Wildlife Management Programme⁴, which is an initiative of the African, Caribbean and Pacific (ACP) group of states and funded by the European Union, through the 11th European Development Fund (EDF). The seven-year SWM Programme mobilizes a group of four international organizations with experience and expertise in wildlife conservation, food security, and policy development, which include UN FAO, the Centre for International Forestry Research (CIFOR),

 $^{^2\,\}underline{\text{https://www.iufro.org/fileadmin/material/science/spps/silvavoc/wildlife-glossary.pdf}}$

³ https://www.cbd.int/doc/c/d535/6de8/4ca44b87cfd392c69d2cc500/cop-14-inf-11-en.pdf

⁴ http://www.fao.org/forestry/wildlife/95602/en/

Wildlife Conservation Society (WCS) and the French Agricultural Research Centre for International Development (CIRAD).

In the second theme of Wildlife offtake, harvesting, hunting and trade, Anastasiya Timoshyna (TRAFFIC) spoke about the overall theory of change required and implemented by the organization towards the sustainable and legal trade in wildlife, including the illustrative examples of the successful interventions (including regulatory, private sector engagement, consumer behavioural change, and multilateral interventions). TRAFFIC's advocacy position concerning the reflection of wildlife trade in post-2020 global biodiversity framework was presented, which was later picked up and discussed in further workshop sessions. The presentation was finished by emphasizing a range of challenges and features of wildlife trade, which need to be addressed to effectively advance the work towards the sustainable wildlife trade, which included following: (1) recognition that everyone is consumer of wildlife; (2) the need for agreed upon terminology; (3) necessity to address the issue of wildlife products' ingredients with trade being majorly hidden; (4) need for a co-ordinated partnership approach to widen perceptions and narrative surrounding wildlife trade; (5) need to simplify communications, despite issue being complex; and (6) need to make CITES Appendix II listing and implementation work better.

The following presentation by *Kelly Malsch* (UN Environment WCMC) focused on the available datasets to enable the monitoring of progress around the changes in wildlife trade in post-2020 context.

Mark Ryan (CIC) introduced the outcomes of the International Conference "Crossroads – Leading the way for wildlife conservation" that recently took place in Namibia, in May 2019. The Conference, hosted by the Ministry of Environment and Tourism of Namibia, served as a platform for workshop style discussions and presentations on wildlife conservation successes, challenges, and best practices from Namibia, Africa and across the world. The CIC General Assembly took place in the framework of the Conference. The major outcome presented was the paradigm shift that is beginning to take place within the hunting community, and CIC membership in particular, with conservation interests starting to be put first ahead of those focused purely on hunting.

Shane Mahoney (IUCN SULi and Conservation Visions) was the final presenter of the theme. His presentation gave an example of the 'North American model' of SWM, which has seen a dramatic positive increase in the populations of hunted animals following rapid decline and collapse in unmanaged conditions. He also introduced the Wild Harvest Initiative (WHI)⁵, which is the first serious effort to synthesize and evaluate the combined economic, conservation and social benefits of recreational animal harvest in American and Canadian societies. The Initiative is a multi-year program designed to measure and analyse the biomass of wild animal protein harvested by citizens of the United States and Canada, and to assess its nutritional and economic value. In the discussions that followed, issues covered included how reliable data can be obtained to monitor and measure change in the post-2020 context. It was agreed that first and foremost it is key to clarify what the target and question is, as various datasets could be available, as well as the ways to measure it.

Under the theme **Human-wildlife-livestock interface**, *Alexandra Zimmermann* (IUCN HWC Task force) spoke about the global priorities, challenges and opportunities for human-wildlife conflict (HWC).

This was followed by *Amy Fraenkel* (CMS), highlighting the contributions of the Convention on the Conservation of Migratory Species of Wild Animals (CMS) to SWM and key priorities to the Post-2020.

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⁵ https://www.conservationvisions.com/wild-harvest-initiative

François Diaz (OIE) spoke about the activities of the World Organisation for Animal Health relevant to wildlife management.

4. Vision to 2050 in the context of Sustainable Wildlife Management

The sessions to start formulating the 2050 Vision in the context of SWM kicked off from the presentation by David Cooper (CBD Secretariat and CPW Chair), and Neil Burgess (UN Environment WCMC) to set the scene for the discussions and participants' input.

David Cooper presented the CBD Secretariat's process for the preparations of the Post-2020 Biodiversity Global Framework and highlighted that the negotiations to develop the post-2020 framework, prior to the 15th meeting of the CoP to the CBD will be undertaken by a dedicated Openended Working Group (OEWG). It was noted that the outcomes of this Workshop could be made available to the CBD website in time for the first meeting of the OEWG on the Post-2020 framework (27-30 August 2019 in Nairobi, Kenya).

Neil Burgess (UN Environment WCMC) presented some observations on existing large-scale scientific analysis of sustainable use in wildlife species. Of particular relevance to the topic of SWM was the emphasis on the findings of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) Global Assessment Report on biodiversity and ecosystem services (2019), which estimated that the direct overexploitation is the main cause of marine biodiversity loss and second most significant cause of terrestrial biodiversity loss. A few other highlights included:

- a major scientific gap lack in linking conservation status, trends, spatial threats to trade and sustainable use. A question was raised whether the planned IPBES sustainable use assessment will fill this gap;
- location of threats to wildlife species from over-exploitation can be mapped, but the same cannot be done for sustainable use;
- trends in used species using the IUCN Red List and WWF Living Planet database can be measured, but the results are not easy to interpret, and little information is published.

In the afternoon of the first day, two groups discussed **what does the 2050 Vision mean in tangible terms in relation to wildlife / wildlife management?** This discussion was primarily with the framework of the CBD 2050 Vision: "By 2050, biodiversity is valued, conserved, restored and wisely used, maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential for all people", and other relevant organizations' vision with this respect.

The discussion in Group 1 highlighted the issues with the 2050 Vision, concerning the benefits, which were clarified as those applicable to biodiversity and people. <u>Diaz et al (2018) paper</u> was suggested as a useful reference to the issue on human dependence and benefits from nature.

The elements of the 2050 vision in relation to SWM were suggested to include that wildlife populations are robust, IUCN Red List shows improvements, overall wildlife population trends are positive, and that the ability of future generations to use wildlife is not compromised. Linkages were also made to 'bending the curve' of biodiversity loss, an approach which would have a suggested set of indicators, including e.g. abundance of biodiversity, biodiversity intactness index, reductions of threats, however limited attention to the issues of sustainable use and trade in wildlife. The group noted that the issue of consumer demand for sustainable products and the reduction in the consumption of unsustainable products was missing from the vision.

Group 1 also noted that the Living Planet index for datasets in Canada and the Russian Federation, demonstrate that the population trends for the used species are all positive, recovering from low populations, generating more benefits to conversation and livelihoods.

A part of the discussion veered into whether some wildlife is more likely to be used sustainably, and what indicators there are of it. Whether IUCN Red List provides such criteria was debated, in the context of whether threatened species should not be used. It was also considered that adaptive sustainable management measures could enable the sustainable use, even of threatened wildlife, and no clear-cut definition exists for species that should be excluded from use.

Other organizational visions of relevance were discussed, including for example that of <u>CITES</u> (<u>Vision to 2020</u>), which was found to be useful in framing the issues of use, international trade and linkages to the reduction of the rate of biodiversity loss: "Conserve biodiversity and contribute to its sustainable use by ensuring that no species of wild fauna or flora becomes or remains subject to unsustainable exploitation through international trade, thereby contributing to the significant reduction of the rate of biodiversity loss and making a significant contribution towards achieving the relevant Aichi Biodiversity Targets."

Group 1 was considerably interested in the vision of <u>CBD's Global Strategy for Plant Conservation</u>, and in the idea that this could potentially be adapted to cover all wildlife, as follows:

Our vision is of a positive, sustainable future where human activities support the diversity of wildlife (including the endurance of genetic diversity, survival of wild species and communities and their associated habitats and ecological associations), and where in turn the diversity of wildlife support and improve our livelihoods and well-being.

Group 1 also discussed the drivers of biodiversity loss of specific relevance to sustainable wildlife management (Figure 1). The direct (land / sea use change and direct exploitation) and indirect drivers from the IPBES report were found to be relevant.

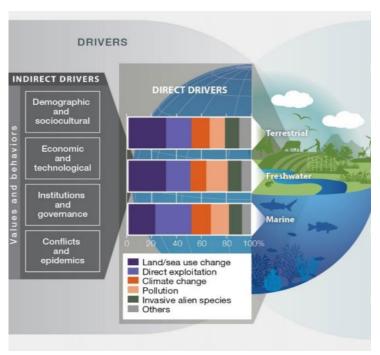


Figure 1. Examples of drivers of biodiversity loss discussed by workshop participants. Adapted from: IPBES Global Report
Assessment on Biodiversity and Ecosystem Services (p.12)

In addition to these drivers, the following were specifically mentioned (although they could be wrapped into the drivers already noted):

- Impact of infrastructure on wildlife
- Disconnect from nature
- Corruption (wrapped under 'governance' in the IPBES report)
- Lack of education of women / girls

There was also a discussion about **the drivers of illegal and unsustainable trade**, building on a <u>TRAFFIC study (2008)</u> (Figure 2):

- Awareness of wildlife volumes and products consumed, as well as the awareness of traders
- Livelihoods
- Law and regulations
- Markets and prices
- Resource management

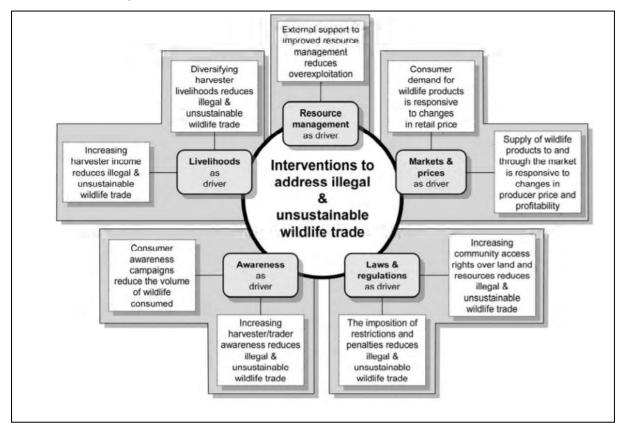


Figure 2. Assumptions underlying wildlife trade interventions. Source: https://www.traffic.org/site/assets/files/5435/whats-driving-wildlife-trade.pdf

Group 2 started the discussion about the 2050 vision by looking at the vision of the IUCN Sustainable Use and Livelihoods Specialist (SULi) Group to see if it is helpful for the SWM overall:

"Thriving wild species provide diverse and equitable benefits (tangible and intangible) to people, who are motivated and empowered to protect and conserve them."

Following the discussion, Group 2 concluded that four fundamental elements of SULi vision could be useful for the overall vision statement but could be more nuanced and detailed. Group 2 noted the following important elements that need to be dealt with in the journey towards sustainable wildlife management:

- The notion of wild species and their habitats, thriving wild nature, natural ecological processes, healthy resilient ecosystems, biological diversity.
- Benefits for people need to be meaningful benefits, with costs (e.g. of living with wildlife) and benefits shared between different levels, as well as ensuring equity at all scales.
- Sustainable use and management should be defined as such that is within sustainable limits and in active engagement with wildlife (with e.g. protected areas work outside of this scope).
- Governance, tenure rights and the responsibility for stewardship.

- Customary and traditional knowledge.
- Connectedness to nature and co-existence with wildlife.
- The need for a global partnership of wide array of stakeholders for sustainable use.
- Recognition and refinement of approaches effective at multiple scales and in various contexts.
- Need for a responsive enabling framework allowing response to changing needs.
- Recognition of the multiple values of wildlife.
- The notion of the importance of nature for nature as well as for culture and society.

Following this, the Group 2 focused on the discussion of **Pathways: how to get from the current trends to the 2050 vision**.

Group 2 observed that there is a tendency to focus on the illegal / unsustainable element and stronger focus is needed on the legal / sustainable use and trade. There are multiple complexities with it, including where wildlife use / trade is sustainable but illegal, or where use and trade is legal but unsustainable.

Among other pathways are:

- Recognizing and communicating the values of wildlife.
- Better communication of the conservation benefits of sustainable use and associated behavioural change.
- Local solutions scaled up to other levels.
- Current responses to unsustainable / illegal wildlife use and trade are failing due to corruption, which is an underlying cause to address.
- Need a lot more examples of the positive mechanisms (Marine Stewardship Council (MSC), FairWild certification) and build on those.
- Need to address value / trade chains which are already ecologically sustainable, but can improve if the issue of benefit sharing is addressed.

In terms of **drivers to be addressed**, Group 2 highlighted the need to examine the big drivers of change such as population growth, climate change, middle class growth, conventional food production systems, as well as smaller drivers. Unsustainable consumption appears to be at the core of the issue. Ways need to be found for the right message to come across about sustainable consumption, about the importance of wildlife use, and it's scale (as bulk of volume and value of wildlife use – fish and seafood, timber and wild plant products – if not what public worry about).

On the subject of **how these can be addressed and by whom**, Group 2 concluded that different audiences / stakeholders have different levers of influence and action areas. Those discussed included:

- Governments → better regulations
- Companies (small and medium enterprises (SMEs) and large companies) → build sustainable use
 / trade in their supply chains
- Consumers → drive towards better consumption practices, messaging about sustainable use of wildlife in the context of sustainable living (wild sourced sustainable meat or fish sold to people with concerns about healthy eating). Participants of Group 2 gave an example of the platform "Change Wildlife Consumers⁶", where same consumer behavioural change approaches for high profile products can be applied to promote sustainable use of wildlife. Consumers should also be encouraged to put pressure on companies, as it is not just government regulation that will bring about change.
- The conservation community also needs to change and become more effective.

Across all these audiences it is about connecting sustainable use and trade to the wider sustainability agenda (for example climate change, land-use changes, and the consumption of wildlife).

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⁶ https://www.changewildlifeconsumers.org/

Lessons need to be learnt from the Extinction Rebellion organisation⁷. This is to inject more urgency into our messaging, but care needs to be taken for it to be nuanced to avoid the "use is bad" knee jerk. There is also opportunity to learn from other sectors, for example campaigns about wearing seat belts (not don't drive car).

There is also a need to draw on experience from disruptive companies like Uber and WhatsApp to understand how to effectively bring about transformational change, as these all are effectively social movements.

The role of regulations in managing the use / trade market and consumption can further be explored. For example, there could be 'pre-competition' measure ('choice editing') of only sustainable products being sold, stopping consumers from making complicated decisions themselves.

Finally, on transitions for change, there is a need a transformational shift from a resource-depleting economy to a circular one. Sustainable wildlife use and trade is however not on the radar within circular economy discussion so far with its environmental agenda focussing on waste.

In a plenary discussion that followed, a range of discussion topics were highlighted, picked up in breakout groups the following day:

- Behavioural science: More explicit expression of behavioural science in the SWM
- Tackling the narrative of consumer demand and SWM: sustainable consumption vs reduction of the demand
- Benefits and costs of SWM along the value chains: for people living with wildlife, for other 'users' (suffering e.g. from poor distribution of benefits)
- SWM / wildlife narrative and the topics of circular economy, green economy, natural capital, sustainable consumption and production

5. Sustainable wildlife management: challenges

In the morning of the second day, three discussion groups were formed, which reported back following the discussion. A summary of the discussions and conclusions of each group is as follows:

1) Tackling the narrative of consumer demand and SWM: sustainable consumption vs. reduction of the demand

The deliberations of the Group focussed on different situations in which the term 'demand reduction' should be appropriate vs 'addressing over-consumption or excessive consumption' or 'practice responsible consumption'. Using the latter terms allow nuancing the communication messages in support of sustainable use and trade in wildlife.

It was also noted that the definition of 'consumers' is inclusive of various groups of stakeholders, including governments, private sector, all of which require different set of approaches to address.

The need for simple language in communications and clear messages was yet again emphasized. The nuances of different cultures were also pointed out, together with power of the notion of 'citizen' rather than 'consumer', in particular for some places. It can have a strong impact, linked to an important (cultural) narrative to change.

The need for including development of the communication messages was also discussed, reflecting on how different the perspectives are of e.g. conservationists and consumers, together with the understanding of the reasons for desire / demand for particular qualities of consumer products.

2) Benefits and costs of SWM along the value chains: for people living with wildlife, for other 'users' (suffering e.g. from poor distribution of benefits)

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⁷ https://rebellion.earth/

The Group highlighted the importance of different categories of nature's contributions to people, building on the article by <u>Diaz et. all (2018)</u>. The article was suggested as a useful reference material as regards the categories (Figure 3).

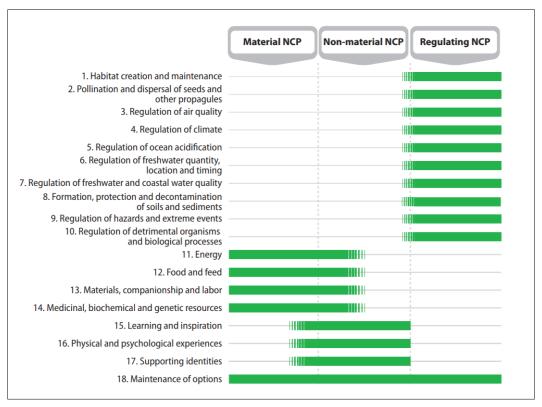


Figure 3. Nature's contributions to people (NCP) reporting categories used in IPBES assessments. Source: Diaz et. all (2018).

The Group concluded on the following basic principles concerning the distribution of benefits in sustainable wildlife management:

- Need to account for the multiplicity and diversity of benefits and costs, and the fact that these are highly context-dependent (geographically, taxonomically, culturally) and vary along the trade chain (in nature and magnitude) – and this means that there are always going to be trade-offs, which should be acknowledged;
- Many benefits of wildlife use are invisible to the average consumer (e.g. shea butter in chocolate)
 there is a need to better communicate the benefits;
- Benefits to those we're trying to convince to conserve wildlife need to be meaningful;
- Benefits need to be equitably distributed to those that experience the costs, i.e. locally, and along the value chain, and temporally (to ensure longer-term sustainability);
- Benefits of SWM should at the very minimum offset the costs, at all levels (including geographically, along the trade chain with equity between various levels).

The costs and benefits considered are listed in Table 1.

Table 1. Benefits and costs of SWM along the value chains.

Costs	Benefits
Monetary: including for	Monetary: hunting fees towards conservation, wild plant, fungi
protected area	and fuelwood extraction fees towards conservation, protected
management, ranger salaries	area entrance fees etc
etc	

Human-wildlife conflict:	Governments not having to pay the cost of providing an
costs to crops, livestock,	alternative to wildlife if it isn't used
human health	
Broader ecosystem	Healthy ecosystems to people (material, non-material, regulating:
alterations resulting from	food, fuel, regulation of climate, as detailed for example in Diaz et
wildlife use, and loss of	al (2018)
ecosystem services	
	Ethnic and cultural "human diversity" and local knowledge –
	benefits not only those communities concerned but broader
	cultural heritage
	Reputational benefits for governments – bearing in mind "nature
	for nature" concept and public support to it
	Sustainable use of wildlife more sustainable and available in much
	longer-term than benefits from other land uses

3) SWM / wildlife narrative and the topics of circular economy, green economy, natural capital, sustainable consumption and production

The Group first listed a variety of narratives / topics of relevance, following this by identifying current barriers and gaps in integrating the SWM narrative into those, as well as the bridges to make the connection. These are summarized in Table 2.

Table 2. SWM and wider economic and environmental narratives

Narratives / topics	Barriers and gaps	Bridges
Circular economy Re- engineering the existing industrial and business model	 Concept has grown from the 'brown economy' It originates from the 'design' process, with limited understanding of how much products and processes rely on wildlife Lack of understanding of the dependencies on wildlife It focuses on accountability and making it work SWM is not part of this discussion Gap between engineers and 'natural sciences'/biodiversity specialists Concept of renewable resources doesn't come out much in this discussion 	 Simple messaging: it is not a 'material' world, but rather 'living' world Document and communicate dependencies Identify key industries: food; fashion; construction; Sell the 'original circular economy'
Green / Blue economy Systemic change	 SWM is not linked to the definition of 'green markets' Language of 'wildlife' is missing 'Wildlife' occasionally understood as terrestrial animals (and is current focus of CPW), while it includes a variety of species 	 SWM needs to make the connection Silos within sustainable use community CPW needs to broaden the focus of its work on "wildlife"

Natural Capital	 Poor connectivity to stock / flows narrative Wildlife use flows under-rated Often seen as conceptual 	 Connect to natural capital accounting - 80 countries (looking at 'stocks' of resources) Better documentation of wildlife use flows 		
Ecosystem services Nature's contribution to people	 Lack of attention to public goods Lack of understanding of benefits from diversity and components and interdependencies Lack of recognition of fragility 	 Better documentation of wildlife use flows Case-studies, documentation, etc. Connect to natural capital accounting 		
Sustainable Consumption and Production (SCP)	 For visibility of wild-sourced alternatives (seen as inferior - or risky) Opportunity and value 	 Use connections to plastics / palm oil narratives Demonstrate value 		
Nature-Based Solutions	Not discussed	Not discussed		
Climate change	Not discussed	Not discussed		

Additional recommendations were also made, in order to 'connect the dots' between SWM and the wider environmental and economic narratives, as follows:

- There is a need to solve gaps between communities of interest both beyond and within the environmental and conservation community;
- Various narratives need to be connected and common language to be found;
- The understanding of the scope of wildlife use needs to be broadened (including by CPW);
- Evidence needs to be brought together to demonstrate the case and relevance of SWM / use / trade to these narratives and topics;
- The perceptions of narrow interests in the wildlife use community need to be resolved.

6. Overarching principles for integrating SWM in Post-2020 biodiversity global framework and gaps in the current Strategic Plan

The following principles were discussed and compiled for integrating SWM in post-2020 framework, against the gaps in the current Strategic Plan:

- Reciprocal links between sustainable use and benefits to nature and people need to be
 established. There should be recognition of what nature can do for people, not just what people
 can do for nature. This needs to be reflected in the Biodiversity Targets much more explicitly.
- Establishing connectivity between international policy and decision-makers and local communities that harvest wildlife and looking at where benefits should be going to.
- The potential contradiction of human population pressures and overall species abundance need be reconciled.

- There should be a clear connection and reflection between sustainable use and trade in wildlife
 and addressing the over-exploitation driver of biodiversity loss: preventing over-exploitation and
 promote sustainable use.
- Links need to be established to social and behavioural change, including identifying a vision of a "good life" (linked to the transformations in the IPBES summary and the connection to addressing the indirect drivers of biodiversity loss).
- Telecoupling: addressing the dislocation between action and impact.
- Data and knowledge gaps on uncertainties about SWM risks and benefits should be addressed.
- Prioritization of targets is important, at cross-cutting and national levels; Interdependence, as well as prioritization. Aichi Targets are all prioritized equally.
- The importance to reflect need for good governance (incl. regulatory framework and accountability / anti-corruption measures and behavioural norms) for SWM at different scales.
- Economic opportunities of SWM e.g. wildlife tourism and building a better business case should be highlighted.
- Ecological and broader connectivity issues needs greater recognition.
- Need to include trans-boundary co-operation (international, regional and cross-border), in particular for conservation of threatened and endangered species, and for addressing the issue of international wildlife trade.
- Landscape scale conservation should be recognized and reflected, beyond protected areas, as well
 as the significant potential contribution of sustainable wildlife use and trade for the success of
 landscape scale conservation.

Following gaps in the current Aichi Targets (or their implementation) in the context of SWM were also listed:

- Lack of targets on wildlife trade and use, to address the key driver of biodiversity loss and enable conservation and livelihood benefits from sustainable use and trade.
- Not sufficient focus on governance.
- Countries can pick and choose what they report on to international conventions and agreements such as CBD, CITES, and CMS.
- All Aichi Targets are equally prioritized.
- Implementation gaps of Aichi Targets.
- Current targets do not capture what is the most sustainable way, where there is use of wildlife (with some exceptions, e.g. reference of the GSPC to FairWild best practice).
- Optimal wildlife population levels are not captured presently.
- The transboundary collaboration (e.g. as relevant to international wildlife trade, as well conservation of threatened and endangered species) is not currently captured.

7. Milestones for 2030 and 2040

Milestones were discussed to get on to the right track in the next decade (by 2030 a mechanism is put in place) so that by 2040 the necessary action has been undertaken to meet the 2050 vision. The following were captured:

- Strengthen the accountability mechanisms in place. The question was raised on how these commitments will be taken to governments.
- Improve understanding of sustainability (incl. sustainable use) by putting in place a monitoring system, for example natural capital accounting systems established including a biodiversity component at national level. National level monitoring to demonstrate that the resource is sustainably managed.

- By 2025, under the banning pollution heading, the issue of priority pollutants is addressed, including the issue of perverse subsidies and pollutants as drivers of unsustainable practices.
- Land use plans are in place and identify priority areas for different sectors (for example ecological red lines in China).
- Ensure policy coherence government policies are coherent with national and international commitments on biodiversity and SWM.
- No net loss for biodiversity from infrastructure development (there is a need to link to restoration agenda).
- Investments ongoing into alternative protein sources and promoting sustainable diets and ensuring availability of protein sources, coupled with the efforts around behavioural change.
- By 2025 all actions to address / adapt take into considerations biodiversity safeguards and naturebased solutions.
- By 2030 all restoration activity needs to be positive for wildlife and ensure connectivity.
- Holding governments accountable on connectivity. Meeting the target around wildlife economy.
 Connectivity and promoting more free-flowing rivers. Important to connect areas of biodiversity significance and ensure that protected area networks and other ecologically important areas are better connected.
- By 2030 all management plans for all wild harvested fauna and flora are in place.
- Addressing priority invasive species and places.

8. Potential post-2020 targets related to sustainable wildlife management

The discussions of the workshop have focussed primarily around the wildlife use and trade target(s). It was also recognized at the workshop that separate target(s) may be recommended for addressing the issue of human-wildlife conflict. No specific discussion outcomes were captured during the workshop, but the language for the potential post-2020 target on human-wildlife conflict was discussed by the IUCN SSC Human-Wildlife Conflict Task Force at its meeting in July 2019, and it is included in Annex 4 of the present report.

Workshop participants recognized wildlife trade and use as an issue at the nexus of today's most pressing conservation and development concerns linked to human use of natural resources. The trade in wild animals and plants contributes to the livelihoods of hundreds of millions of people around the world and generates hundreds of billions of dollars of economic value annually. However, all too often, efforts to ensure this trade remains legal and at sustainable levels struggle to succeed. This jeopardises the status of species, ecosystems and the well-being of people who depend on wild resources for their livelihood.

Poaching, illegal logging, and other types of wildlife crime have been particularly severe in Asia, Africa and Latin America, where wildlife populations are under extreme pressure due to growing demand, particularly from markets in Asia. Well-known species such as elephants, rhinos and tigers remain at risk, with poaching for trade also threatening a wide variety of other fauna including pangolins and species of reptiles, and birds. Not only terrestrial animal species are threatened by illegal activities, with a growing number of timber and plant species, marine fish and other aquatic species also illegally targeted to supply markets including in Asia, the USA, and Europe. As a result, over recent years the issue of wildlife trade has been brought to the forefront of global attention, at the highest level of government. In July 2015, the UN General Assembly adopted its first-ever Resolution on Tackling Illicit Trafficking in Wildlife (69/314) and this was followed by numerous commitments on wildlife trade being adopted by individual countries at the highest political levels, as well as co-operative strategies and plans to address wildlife trade adopted by regional economic integration organisations and other regional bodies.

For many species, the impacts of illegal trade are compounded by legal but unsustainable trade linked to a wider lack of good governance and effective management, as well as persistent and systemic corruption in the area of natural resources management.

The Aichi biodiversity Targets in the CBD's Strategic Plan to 2020 do not include a target specific to trade in wildlife, despite illegal and unsustainable trade being one of the key drivers of biodiversity loss, and sustainable, well-managed legal wildlife trade having a scope for providing benefits to all from biodiversity and ecosystem services. Selected Aichi Targets (for example Target 6 concerning fish, invertebrate stocks and aquatic plants), as well as the Targets of the CBD's Global Strategy for Plant Conservation, recognise and reflect on the importance of addressing illegal and unsustainable trade in species of wild flora and fauna. The relevant areas of work in CBD include Sustainable Use of Biodiversity, Forest, Health and Biodiversity, Global Strategy for Plant Conservation, Business and Biodiversity, among others.

While the commitments of CBD Parties concern the issues of national jurisdiction, in the current set-up of the global biodiversity targets, the impacts of trade on biodiversity in other countries is poorly covered. Such impacts on biodiversity outside national borders are exemplified by international wildlife trade currently lacking the commitment to implement measures to ensure trade is legal and sustainable at the global level. While certain other Multilateral Environmental Agreements—in particular the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and the Convention on the Conservation of Migratory Species of Wild Animals (CMS)—address elements of wildlife trade, wider commitment under the umbrella of the global biodiversity framework is needed, including to provide the direct link to the implementation of the 2030 Agenda for Sustainable Development.

The 2030 Agenda for Sustainable Development and the accompanying Sustainable Development Goals (SDGs) and Targets has renewed policy attention on sustainable use of marine and terrestrial ecosystems (SDGs 14 and 15), sustainable production and consumption (SDG 12), and provided a framework for measuring progress. It also helped reinforce similar commitments to ensuring sustainable natural resource use is reflected in a wide range of intergovernmental, national and private sector policies. Of specific direct relevance to wildlife trade is SDG 15.7: "Take urgent action to end poaching and trafficking of protected species of flora and fauna, and address both demand and supply of illegal wildlife products"

Following this overall consensus on the need for an expression of target(s) concerning wildlife use and trade, a number of different ideas for targets emerged from discussions to take forward into the post-2020 global biodiversity framework:

By 2030, legal use and trade of wild fauna and flora⁸ at sustainable levels enhances the conservation of biodiversity and the benefits to human well-being (supporting Strategic Goal D)

By 2030, the pressure of illegal and unsustainable use and trade in wild fauna and flora⁹ is reduced, contributing to the conservation of biodiversity and human well-being (supporting Strategic Goal B)

Following the definition of potential targets, the participants brainstormed on a variety of approaches that can be taken to develop a set of **measurable goals**, to be underpinned by a set of indicators. It was suggested that such measurements will be possible by **linking to priority / key species indicative** and representative of changes and progress in wildlife use and trade. See Table 3.

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⁸ The issue of whether 'fungi' should be included in the language of the potential targets was brought up at the review stage, however not captured during the workshop discussion

⁹ Ibid

Table 3 Examples of measurable goals for wildlife use and trade targets

Potential Targets	How to measure these targets? For example:
By 2030, legal use and trade of wild fauna and flora at sustainable levels	Best practice guidelines (e.g. FairWild Standard) are applied to trade in 50 priority wild plant value chains (and number of people benefitting from equitable trade)
enhances the conservation of biodiversity and the benefits to human well-	CBD Voluntary guidance for a sustainable wild meat sector (Decision 14/7) is applied to selected key wildlife species in use and trade and by key tropical and sub-tropical countries
being	Robust traceability mechanisms established for high risk wild species of fauna and flora in trade
	For CITES-listed species of flora and fauna, increase in a number of Appendix I down-listing and decrease in CITES compliance interventions
	Species management plans are developed for key used and traded wild species of fauna and flora in trade
	Measurable increase in the number of people relying on and benefitting from sustainable use and trade in species of wild fauna and flora
By 2030, the pressure of	Illegal trade in elephants, rhino, and tiger products reduced by 50%
illegal and unsustainable use and trade in wild fauna and flora is reduced,	Unauthorized timber exports reduced by 50% or more from countries with significant illegal trade from high conservation value forests
contributing to the conservation of biodiversity and human well-being	Risk of overexploitation reduced by 30% for "high risk" shark species in trade

Further refinement of the targets and measurable goals will be required to reach an agreement, but it appeared that there will be goals and indicators to underpin such targets.

Additional work is required to confirm the level of ambition for the post-2020 targets as expressed in the measurable goals, as the examples given may not be ambitious enough to 'bend the curve'.

It was also observed that coordination is needed with the organizations and stakeholders leading on the measurement of progress of Aichi Target 6 (Sustainable Fisheries), to integrate the information.

It was also observed that further research is needed into the data sets available on human dependence, as well as people benefitting from wildlife use and trade.

9. Available datasets and current gaps

Participants reviewed known datasets that can assist with building indicators underpinning targets linked to SWM. These were grouped under the categories of: Trade, Human-Wildlife Conflict, Use, Species / Status of populations, Area, Management and Other. For further details see Annex 3: Datasets to assist the development of indicator on sustainable wildlife management target(s) for the details of the discussed datasets, as well as their limitations and indicator potential.

Few general comments were made within the group when the results of the datasets discussion were presented. These included:

- The recognition that so far 'bending the curve' thinking focusses on species (reducing extinctions, improving diversity, more wild places), not impact on people. This is an important gap, and sustainable use narrative can assist with the necessary arguments. The 2050 vision should clearly articulate the 'benefit side'. This also links to how business case and civil society case could be made.
- Lack of datasets that look into the aspect of 'benefits'.
- That SWM can provide the incentive for monitoring and management (in-part because in order to sustainably manage more sensitive species, so much more information is needed, exemplified by e.g. trophy hunting examples).
- The importance of integrating points of sustainable use and wildlife and benefits to conservation and livelihoods simultaneously.
- On human-wildlife conflict, there are datasets at the national level in some countries, but it is not
 systematized, and the data is very scattered. There is very little data on 'costs' of the conflict (how
 much damage occurred). Examples of the economic cost of IWT (including timber, fisheries,
 animals) exist, looking at total costs to the economy from natural resources use.
- There should be further cross-checking with the datasets on protected areas.
- The issue was raised of how additional systems for gathering data can be created, including from other sources.
- And that there are some additional existing data sets in addition to those discussed, for example data from the Global Reporting Initiative.

10. Next steps

The information gathered at the Workshop will help inform the CPW response to the development of a Post-2020 Global Biodiversity Framework and the integration of sustainable wildlife management into it.

It was agreed that:

- A final meeting report and a two-page summary should be shared with the Post-2020 dedicated
 Open-Ended Working Group through the submission of the record as an information document to
 the Secretariat of the Convention on Biological Diversity. The Workshop Report would make clear
 that it reflected the views of the participants CPW members, CCI partners, and other
 organisations and experts but that it did not represent a formal position of any of these.
- A final meeting report would be made available to the CBD post-2020 website in time for the first meeting of the Open-Ended Working Group on the Post-2020 Global Biodiversity Framework (27-30 August 2019 – Nairobi, Kenya). The meeting would serve as good opportunity to present CPW's contribution regarding the post-2020 process.
- A final meeting report would be presented at appropriate meetings, including the Eighteenth meeting of the Conference of the Parties to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (August 2019), Twenty-third meeting of the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) to the Convention on Biological Diversity (November 2019), the IUCN World Conservation Congress (June 2020).
- All participants were encouraged to take the outcomes and messages from the workshop back into their own institutions and explore how SWM might be better engaged into the development of a post-2020 global biodiversity framework.

Annex 1. Workshop agenda

,	rkshop agenda Day 1: Tuesday, 25 June 2019					
09.00 - 09.20 1. OPENING OF THE WORKSHOP, Seminar Room 1.25						
09.00 - 09.20	1. OPENING OF THE WORKSHOP, Seminar Room 1.23					
	Opening remarks	David Cooper, CBD Deputy				
	Opening remarks	Executive Secretary and CPW Chair				
	Opening remarks	Mike Rands, Executive Director,				
	Opening remarks					
	Onaning remarks	Cambridge Conservation Initiative				
	Opening remarks	Steven Broad, Executive Director, TRAFFIC				
09.20 - 09.45	2 INTRODUCTION AND THE DURDOCE OF THE WORK					
09.20 - 09.45	2. INTRODUCTION AND THE PURPOSE OF THE WORK	SHOP, Seminar Room 1.25				
	Introduction to the workshop agenda	David Cooper, CBD Deputy				
		Executive Secretary and CPW Chair				
	Collaborative Partnership on Sustainable Wildlife	Kristina Rodina, CPW Secretary, UN				
	Management: Who we are and what we do?	FAO				
	Discussion	All participants				
09.45 - 12.15	3. PRESENTATIONS SESSION: SUSTAINABLE WILDLIFE	MANAGEMENT, Seminar Room 1.25				
Theme 1: Wild	llife, food security and livelihoods					
09.45 - 09.55	Joint IUCN and IIED work on local communities and	Dilys Roe, IIED				
	illegal wildlife trade	, .				
09.55 - 10.05	Overview of the "Landscape, Wildlife, People"	Bianca Notarbartolo di Sciara, UN				
	Programme	Environment				
10.05 - 10.15	Sustainable wildlife management: Guidance for a	Daniel Ingram, CIFOR				
	sustainable wild meat sector					
10.15 - 10.30	Theme 1 discussion	All participants				
10.30 - 10.45	Coffee break, Common Room, David Attenborough Bui	lding				
Theme 2: Wild	dlife offtake, harvesting, hunting and trade					
10.45 - 10.55	Towards reducing the illegal wildlife trade and	Anastasiya Timoshyna, TRAFFIC				
	enhanced benefits from sustainable, legal wildlife					
	trade					
10.55 - 11.05	Mobilising data in support of sound management of	Kelly Malsch, UNEP-WCMC				
	wildlife emerging opportunities					
11.05 - 11.15	Highlights from the conference "Crossroads- Leading	Mark Ryan, CIC				
	the Way for Wildlife Conservation" in Namibia					
11.15 - 11.25	Sustainable Wild Meat Harvests in North America	Shane Mahoney, IUCN				
11.25 - 11.45	Theme 2 discussion	All participants				
Theme 3: Hum	an-wildlife-livestock interface					
Theme 3: Human-wildlife-livestock interface 11.45 - 11.55						
11.43 - 11.33	and opportunities	Alexandra Zimmermann, IUCN HWC Task force				
11 55 12 05	Contributions of the Convention on the of the					
11.55 - 12.05		Amy Fraenkel, CMS				
	Conservation of Migratory Species of Wild Animals					
12.05 12.15	(CMS) to sustainable wildlife management	Francois Dioz. OIF				
12.05 - 12.15	World Organisation for Animal Health, Organisation	Francois Diaz, OIE				
12.15 12.20	and its activities on wildlife management	All participants				
12.15 - 12.30	Theme 3 Discussion	All participants				

12.30 - 13.15	4. SETTING THE SCENE: 2050 VISION FOR BIODIVERSITY AND IMPLICATIONS FOR THE POST-2020 BIODIVERSITY FRAMEWORK, Seminar Room 1.25 Presentation by David Cooper, CBD Deputy Executive Secretary and CPW Chair, and Neville Ash, Director, UNEP WCMC				
13.15 - 14.00	Lunch break, Common Room, David Attenborough Build	ling			
14.00 - 16.30	 5. DEVELOPING THE POST-2020 BIODIVERSITY FRAMEWORK: Sustainable Wildlife Management, Manatee Room and Garfield Weston Room Break groups will discuss one set of questions separately: Visioning the world we want in 2050: what ideally would the vision be for wildlife management and how does this link to the CBD Vision (Living in harmony with nature)? What are the milestones in 2040? What should happen by 2030 to reach the 2050 vision? 				
15.30 - 15.50	Coffee break, Common Room, David Attenborough Buil	ding			
15.50 - 16.30	 6. Agenda item 5: continue, Manatee Room and Garfield Weston Room What are the possible elements and commitments required to achieve the 2030 goals, and potentially become elements of the post-2020 global biodiversity framework? 	Facilitated breakout groups			
16.30 - 17.30	1.25 Presentation of findings from each break-out group 8. (15-20 min per group) Report back by rapporteurs				
18.30 - 20.00	Reception - Common Room, David Attenborough Building				

Day 2: Wednesday, 26 June 2019, Seminar Room 1.25					
09.00 - 09.30	9. RECAP OF THE DAY 1 AND INTRODUCING WORK FOR DAY 2	David Cooper, CPW Chair			
9.30 - 10.30	 SUSTAINABLE WILDLIFE MANAGEMENT: Break out groups' discussion Behavioral science: More explicit expression of behavioral science in the SWM Tackling the narrative of consumer demand and SWM: sustainable consumption vs reduction of the demand Benefits and costs of SWM along the value chains: for people living with wildlife, for other 'users' (suffering e.g. from poor distribution of benefits) SWM/wildlife narrative and the topics of circular economy, green economy, natural capital, sustainable consumption and production Report back and discussion 	Facilitated breakout groups			
10.30 - 11.00	Coffee break, Common Room, David Attenborough Buil	ding			
11.00-13.00	 POSSIBLE INPUTS OF THE POST-2020 BIODIVERSITY FRAMEWORK: Break out groups' discussion What's missing with the current global biodiversity strategy in the context of SWM? What are the milestones by 2030, 2040 to bring us closer to the achievement of the 2050 vision Looking into data sets available for SWM-related targets/goals (what's available, does it cover sustainable use, and what else needs to be added) Wildlife trade and other specific Goals or Subgoals 	Facilitated breakout groups			
13.00 - 14.00	Lunch break, Common Room, David Attenborough Build	ding			
14.00 - 15.30	 REPORT-BACK PLENARY SESSION Presentation of findings from each break-out group Discussion 				
15.30 - 15.50	Coffee break, Common Room, David Attenborough Buil	ding			
15.50-17.15	 4. POST-2020 BIODIVERSITY FRAMEWORK: Key elements of sustainable wildlife management Presentation, discussion and agreement of the outcomes Agreement on next steps 				
17.15 - 17.30	5. CLOSING OF THE WORKSHOP	David Cooper, CPW Chair			

Annex 2. List of participants

Nº	Name	Organization
1	Alexandra Zimmermann	IUCN SSC (HWC Task Force), World Bank (GWP), Oxford University (WildCRU)
2	Alice Bucker	Fauna & Flora International (FFI)
_	Alstone Mwanza	Cambridge University
	Amy Fraenkel	Convention on the Conservation of Migratory Species of Wild Animals (CMS)
	Anastasiya Timoshyna	TRAFFIC
	Bianca Notarbartolo	UNEP
-	Daniel Ingram	University of Stirling
	David Cooper	CBD Secretariat
	Dilys Roe	IIED
	François Diaz	World Organisation for Animal Health (OIE)
	Gayle Burgess	TRAFFIC
	Gen Berry	Cambridge Conservation Initiative, Executive Director Office
13	George Aman	CIC - International Council for Game and Wildlife Conservation
	Giulia Severino	Anglia Ruskin University
15	Helen Schneider	Fauna & Flora International (FFI)
16	Jeremy Eppel	Eppel Sustainability
17	Joseph Hawes	Anglia Ruskin University
18	Kathryn Phillips	UNEP WCMC
19	Kelly Malsch	UNEP-WCMC
20	Kristina Rodina	UN FAO
21	Luis Gustavo de Oliveira Paes	Anglia Ruskin University
	Leme	
22	Mark Ryan	CIC - International Council for Game and Wildlife Conservation
23	Michelle Villeneuve	Fauna & Flora International (FFI)
24	Mike Rands	Cambridge Conservation Initiative
	Naville Ash	UNEP WCMC
26	Neil Burgess	UNEP WCMC
27	Nichola Burnett	UK CITES Scientific Authority (animals)
_	Noelle Kümpel	BirdLife International
29	Olivia Norfolk	Anglia Ruskin University
-	Patricia Cremona	IUCN
_	Patrick Von-Heimendahl	Anglia Ruskin University
-	Paul De Ornellas	WWF UK and WWF International's Wildlife Practice
	Rebecca Drury	Fauna & Flora International (FFI)
	Roland Melisch	TRAFFIC
	Rosalind Helfand	Conservation Leadership MPhil, University of Cambridge
	Ruth Starnes	Anglia Ruskin University
	Sabri Zain	TRAFFIC
	Sarah Ferguson	TRAFFIC Programme Office in Viet Nam
	Sarah Gluszek	Fauna & Flora International (FFI)
	Shane Mahoney	IUCN
	Silviu Petrovan	University of Cambridge (Conservation Evidence)
	Steven Broad	TRAFFIC
43	Tom de Meulenaer	CITES Secretariat

Annex 3. Datasets to assist the development of indicator on SWM target(s)

CATEGORY	Туре	Datasets	Description (Qty, value, etc.)	Scale	Indicator potential?	Limitations
Trade	Wildlife trade (legal)	CITES Trade Database	Quantity, volume CITES-listed species,1975-2018	International		Reporting quality Mixed units CITES only
		LEMIS				
		Fish Catch data - FAO FISHSTAT / RFMOs				
		Sea Around Us				
		Globe Fish				
		FAO Timber				
		ITTO timber				
		Overseas trade stats / Customs				
	Domestic Trade	National level Statistics				
		US / Canada - wild harvest initiative	Harvest / catch data for all hunted/fished species. Species and biomass. States / federal data from licencing, etc.	North America		
		Database of collated wild meat studies	Tropical wildmeat - consumption, market, trade	Collated local studies		
	Illegal Trade	CITES Illegal Trade Report		International		New – data from 2016, data only accessible to ICCWC. Access veto - countries can opt out.

	T				I	т
		World Bank report - costs of illegal timber / fisheries to economies (report in press).				
		Seizure data - TRAFFIC portal	Seizure level information	global		
		Regional seizures - EU-TWIX / AFRICA-TWIX		regional		
		Species-specific databases - ETIS, Rhino, Great Apes				
Human- Wildlife	Human-Wildlife conflict	GAP - no systematic monitoring/data collection				
conflict		Environmental Justice Atlas (ejatlast.com)	All environmental justice conflict			
		Compensation schemes				
Use	Use – consumptive (Hunting pressure)	Defaunation map Benitez-Lopez 2017.	Abundance data in hunted and unhunted areas - available online			
	Use – consumptive	IUCN People & Nature				May not exist.
	Use – consumptive	Red List Index for Use / Non- Use				Change between categories
	Use – consumptive	LPI – used / non-used				Trends in Populations
	Use – non- consumptive	Tourism - global models? (Data gap?) Andrew Balmford Costing nature?	Mapping the global value and distribution of coral reef tourism Other tourism?			
		Visits to national parks? World Heritage				

	Use	Certification schemes - MSC, FSC, FairWild	Example: Proportion of wild fish by volume under MSC certification		Confidential, not really aggregated. [ICIL - sustainability standards. Increasing aspects to impact data.]
	Sustainable Use	IPBES Sustainable Use Assessment?			
	Measure of sustainability	Underlying issue - gap biological data			
SPECIES STATUS Populatio ns	Conservation status	IUCN Red List		Red List Index of extinction risk over time (RLI)	
	Threats	IUCN Red List		Threat mapping	
	Conservation status	National Red Lists / Regional RL (nationalredlist.org)			
	Species population trends	Living Planet Database		Living Planet Index (LPI) of species population trends	
		Biodiversity Intactness Index (BII),	Derived from a model of how the species assemblages responds to land use change and other factors.		largely terrestrially focused and some of the indicators do not exist for the marine environment (BII).
Areas	Protected areas coverage	WDPA / Protected Planet			
	World Heritage sites, Ramsar Sites, KBAs/IBAs, etc.				
	Habitat availability				

	Habitat connectivity				
Managem ent		Gap – laws / level of implementation around regulating hunting/harvest laws			
		Management effectiveness			
		Regulation of "biodiversity" positive / negative goods			
		CITES Appendices, CITES National Legislation Project, etc.	Quality of legislation		
Other		Wildlife Insights (camera trapping), Citizen Science, etc.			
		Subsidies / perverse subsidies	Removal of perverse incentives Creating incentives for activities that help us towards the vision. (Paying for public goods, etc.)		

Annex 4. Potential post-2020 target on human-wildlife conflict (outcome of the IUCN SSC Human-Wildlife Conflict Task Force meeting, July 2019)

Potential Targets	How to measure these targets? For example:
By 2030, human- wildlife conflicts, (i.e. conflicts over wildlife, arising from negative	A global study of the extent of HWC carried out in 2020 is repeated in 2030, showing a quantifiable reduction in HWC via several social, economic and ecological indicators
impacts on livelihoods caused by wildlife, and	Countries have detailed HWC management strategies and policies incorporated into their NBSAPs or other national policies
associated retaliatory or preventative persecution of the	Capacity among governments, NGOs, communities and other conservation actors to manage HWCs has increased significantly
blamed species) is reduced globally by 50%	Resources directed towards HWC management has increased significantly, including a focus on planning for emerging HWCs
30%	IUCN Guidelines on HWC are widely accepted and followed as a guiding standard for effective HWC management by governments, NGOs and conservation professionals

Collaborative Partnership on Sustainable Wildlife Management (CPW) is a voluntary partnership of 14 international organizations with substantive mandates and programmes to promote the sustainable use and conservation of wildlife resources.

For further information contact:

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